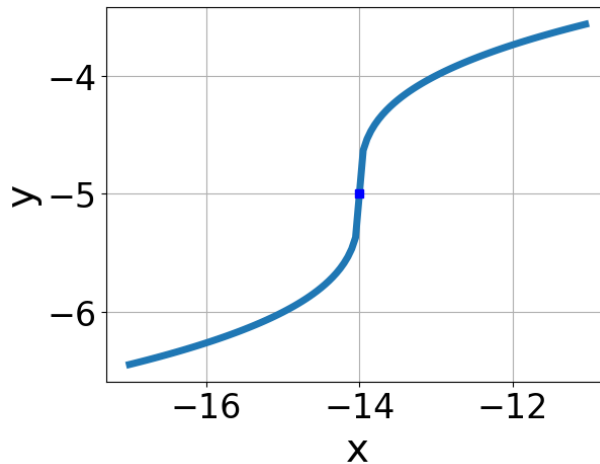


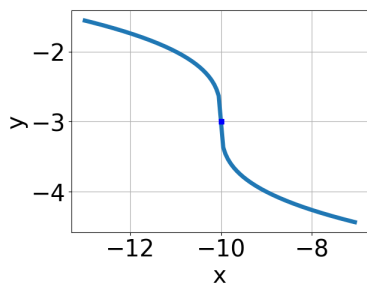
1. Choose the equation of the function graphed below.



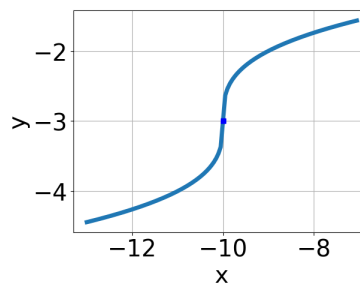
- A.  $f(x) = -\sqrt[3]{x-14} - 5$   
 B.  $f(x) = -\sqrt[3]{x+14} - 5$   
 C.  $f(x) = \sqrt[3]{x-14} - 5$   
 D.  $f(x) = \sqrt[3]{x+14} - 5$   
 E. None of the above

2. Choose the graph of the equation below.

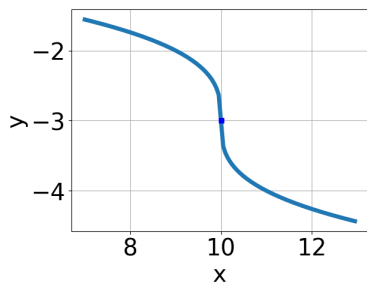
$$f(x) = -\sqrt[3]{x+10} - 3$$



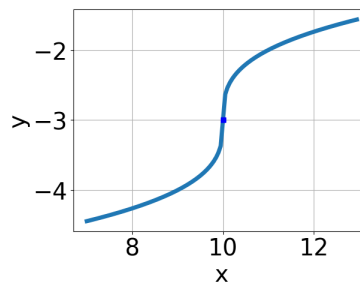
A.



C.



B.

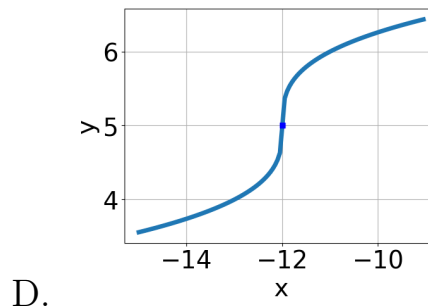
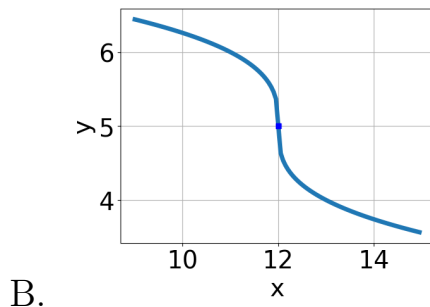
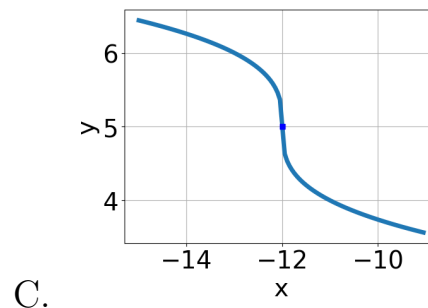
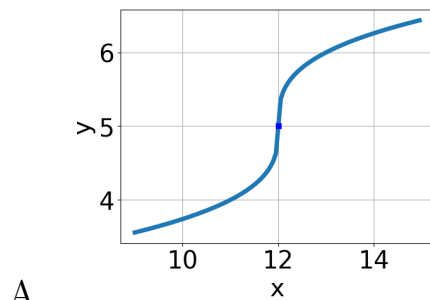


D.

E. None of the above.

3. Choose the graph of the equation below.

$$f(x) = \sqrt[3]{x - 12} + 5$$



E. None of the above.

4. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{72x^2 + 28} - \sqrt{-95x} = 0$$

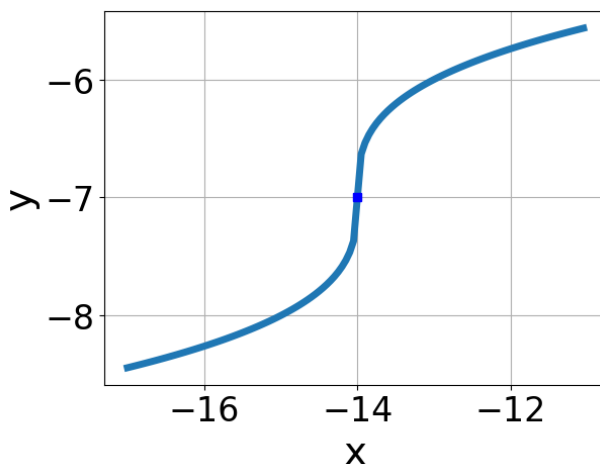
- A.  $x \in [-1.08, -0.68]$
- B.  $x \in [-0.52, 0.09]$
- C.  $x_1 \in [0.42, 0.48]$  and  $x_2 \in [0.4, 1.8]$
- D.  $x_1 \in [-1.08, -0.68]$  and  $x_2 \in [-1, -0.4]$
- E. All solutions lead to invalid or complex values in the equation.

5. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{-6x - 7} - \sqrt{-3x + 3} = 0$$

- A.  $x_1 \in [-1.28, -0.57]$  and  $x_2 \in [-1, 6]$
  - B. All solutions lead to invalid or complex values in the equation.
  - C.  $x \in [-3.86, -3.31]$
  - D.  $x \in [-1.63, -1.32]$
  - E.  $x_1 \in [-3.86, -3.31]$  and  $x_2 \in [-4.17, -0.17]$
- 

6. Choose the equation of the function graphed below.



- A.  $f(x) = \sqrt[3]{x + 14} - 7$
  - B.  $f(x) = -\sqrt[3]{x - 14} - 7$
  - C.  $f(x) = \sqrt[3]{x - 14} - 7$
  - D.  $f(x) = -\sqrt[3]{x + 14} - 7$
  - E. None of the above
- 

7. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{36x^2 - 42} - \sqrt{-6x} = 0$$

- A. All solutions lead to invalid or complex values in the equation.
  - B.  $x_1 \in [-1, 4]$  and  $x_2 \in [1.08, 1.41]$
  - C.  $x \in [-1, 4]$
  - D.  $x \in [-5.17, 0.83]$
  - E.  $x_1 \in [-5.17, 0.83]$  and  $x_2 \in [0.87, 1.09]$
- 

8. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{3x+9} - \sqrt{-8x-9} = 0$$

- A.  $x \in [-0.5, 2.1]$
  - B.  $x \in [-2.7, -0.1]$
  - C.  $x_1 \in [-5.4, -2.6]$  and  $x_2 \in [-1.3, 1.2]$
  - D.  $x_1 \in [-5.4, -2.6]$  and  $x_2 \in [-3.6, -1.5]$
  - E. All solutions lead to invalid or complex values in the equation.
- 

9. What is the domain of the function below?

$$f(x) = \sqrt[6]{-6x-4}$$

- A.  $(-\infty, \infty)$
  - B.  $[a, \infty)$ , where  $a \in [-1.87, -0.88]$
  - C.  $[a, \infty)$ , where  $a \in [-1.11, -0.03]$
  - D.  $(-\infty, a]$ , where  $a \in [-2, -0.91]$
  - E.  $(-\infty, a]$ , where  $a \in [-1.32, -0.62]$
- 

10. What is the domain of the function below?

$$f(x) = \sqrt[4]{-6x+7}$$

- A.  $[a, \infty)$ , where  $a \in [-0.42, 1.1]$
  - B.  $(-\infty, a]$ , where  $a \in [0.98, 1.2]$
  - C.  $(-\infty, a]$ , where  $a \in [0.83, 0.88]$
  - D.  $(-\infty, \infty)$
  - E.  $[a, \infty)$ , where  $a \in [0.94, 3.35]$
-